

We/I Claim:

1. Process for the preparation of porous polymer particles  
5 based on acrylate and/or methacrylate, comprising the steps:
  - a) provision of the reaction mixture comprising at least one monomer chosen from the group consisting of acrylate and methacrylate compounds, and at least one monoterpene as porogen;
  - 10 b) polymerization with the formation of porous polymer particles based on acrylate and/or methacrylate.
2. Process according to Claim 1, wherein the monoterpene or  
monoterpenes are chosen from the group consisting of  
15 citronellal, carvone, dihydrocarvone, menthone, cuminaldehyde, thujone, fenchone, camphor, safranal, borneol, carveol,  $\alpha$ -terpeneol, dihydrocarveol, geraniol, nerol, nerolidol, citronellol, lavandulol, ipsdienol, ipsenol, piperitol, pulegol, 1, 8-cineol, 1, 4-cineol, linalool, perilla alcohol,  
20 myrcenol, sabinene hydrate, carvacrol, thymol, menthol, camphene, pinene, limonene,  $\alpha$ -phellandrene,  $\beta$ -phellandrene, sabinene, terpinene, myrcene.
3. Process according to Claim 1, wherein the monoterpene is  
25 linalool.
4. Process according to Claim 1, wherein an additional porogen is added to the reaction mixture in step a).
- 30 5. Process according to Claim 4, wherein the additional porogen is an organic solvent.
6. Process according to Claim 4, wherein the additional porogen is chosen from the group consisting of alkanes, such  
35 as hexane, alcohols, such as decanol, cyclic alcohols, such as cyclohexanols, and aromatic hydrocarbons, such as toluene.

7. Process according to Claim 1, wherein the reaction mixture comprises linalool and toluene as porogens.

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8. Process according to Claim 1, wherein the process is a process chosen from the group consisting of emulsion polymerization, soapless emulsion polymerization, seeded emulsion polymerization, the two-step swelling process in accordance with Ugelstad, multi step swelling processes, suspension polymerization, seeded suspension polymerization and dispersion polymerization.

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9. Process according to Claim 1, wherein the process is a two-step swelling process in accordance with Ugelstad.

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10. Process according to Claim 1, wherein the monomers used are acrylates or methacrylates with additional functional groups.

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11. Process according to Claim 10, wherein said additional functional groups can be converted to quaternary ammonium groups.

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12. Process according to Claim 1, wherein at least one acrylate or methacrylate with pronounced hydrophilic properties is used.

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13. Uniformly porous polymer particles based on acrylate and/or methacrylate, obtainable by the process according to Claim 1.

14. Polymer particles according to Claim 13, being a methacrylate copolymer.

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15. Polymer particles according to Claim 13, wherein said particles are uniformly porous particles with a pore volume of  
5 from 0.5 to 2.0 ml/g of polymer.

16. Polymer particles according to Claim 13, wherein said particles are uniformly porous particles with an average pore size of from 1 to 25 nm.

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17. Use of porous polymer particles according to Claim 13 for ion chromatography,  
comprising the steps of:

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- a) providing said particles by the process according to Claim 1,
- b) providing a matrix for ion chromatography, said matrix comprising said particles according to Claim 13.